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ABSTRACT

Three experiments examined children's ability to perceive two of the elements of textual cohesion--personal reference and conjunction. The first experiment investigated the ability of 76 eight-year-old children to process anaphora in order to distinguish those children who were becoming fluent readers from those who were not. The children were given a cloze-type task that required them to replace pronouns from a reference group of cohesive ties that operate anaphorically in a text. It was found that although the children could recognize the pronouns in isolation, only fluent readers could replace them in correct position in a text. In the second experiment, 270 8-, 11-, and 14-year-old children completed a task similar to that in the first experiment, with the added task of replacing conjunctions. The results showed a clear developmental pattern and suggested that the mastery of these linguistic processes, especially conjunctions, was still being acquired at age 14. To eliminate the possibility that the results of the two experiments were affected by the nature of the specially written texts, a third experiment was conducted with 11-year-old children, using the work of a well-known author. The results confirmed the earlier findings. Taken together, the findings of the experiments suggest that the ability to perceive cohesion is subject to a lengthy development process. (FL)

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The Development of the Perception of Textual Cohesion

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The Development of the Perception of Textual Cohesion

Introduction

During the seventies the attention of some linguists began to shift from the smaller elements of language, like phrases and sentences, on which they had concentrated to more global factors. (Chapman 1979a). In doing this, their work became more interesting from the educator's viewpoint as teachers more often than not require their pupils to understand complete texts rather than isolated sentences.

One of the more interesting linguistic concepts to be proposed is that of textual cohesion. This property is said to provide a text with its semantic integration (Halliday and Hasan, 1976) this is to say that it is that characteristic of texts that enables us to recognise its wholeness or unity. Through its suggested mechanisms the reader comes to put together the meaning elements of which it is composed. Furthermore, it is detectable by the skilled reader and Barnard (1974) who has shown that if the linguistic mechanisms that are considered to promote textual cohesion are disordered, a skilled reader would be able to detect that disorder, and what is more could, if called upon to do so, restore the text to the order its author originally intended.

If skilled readers are able to detect cohesion, then children must somehow attain the ability to perceive such a property as cohesion as their reading skills develop. Moreover, it is doubtful if this ability is formally taught at present for it is only recently that the cohesive mechanisms have been specified clearly enough for teachers to utilise them. It follows therefore that cohesion must be one of those abstract features that are acquired as reading ability develops.

One recently proposed account, that of Halliday and Hasan (1976) specifies the linguistic features that the author has available for the creation of textual

cohesion. They arrange these features, which they call cohesive ties, in five groups, namely, Reference, Substitution, Ellipsis, Conjunction and Lexical Cohesion.

This paper summarises a set of three experiments which have demonstrated that at least two of the groups of cohesive ties mentioned above, are subject to a reading development pattern that goes from about eight years, during the beginning reading stage when many children appear to be reading fluently through to fourteen and beyond.

Experiment 1

The first experiment which was mounted in 1976/7 examined the ability of 76 eight year old children's ability to process one of the major linguistic cohesive mechanisms, that of anaphora. This experiment distinguished in the following way those children who were becoming fluent readers from those who were not.

The 76 children were given a cloze type task that required them to replace pronouns from the reference group of cohesive ties which operate anaphorically in a text. It was decided to use pronouns in the first instance as they were members of a closed set. It was thought that this restriction would prevent the problems arising from the open set nature of, say, lexical cohesion. Each member of the set of pronouns in English was used in seven short stories specially written by a teacher in a style the children were used to in their early reading books. The pronouns were then deleted according to standard cloze practice and the children were asked to replace them after a check on word recognition had been carried out. Two conditionswere presented to the children. In one version the pronouns that had been deleted were listed in an order different from that in the text at the bottom of each story and in the other the pronouns were not present.

The findings of this experiment (see Chapman 1979b for details) showed that although the children could recognise the pronouns in isolation, only those

children judged by their teachers to be fluent could replace them in correct position in the text, whilst those who were not judged fluent were unable to do so. The presence of the deleted pronouns at the bottom of the story tended to assist the fluent reader but did not appear to increase the scores of the non-fluent readers.

Experiment 2

In the second experiment three improvements were made so as to extend and make the results more representative.

As the scores of the children in the first experiment were much lower than anticipated it was decided to increase the age range of the children involved from 8 to 14 years. Secondly, to ensure that the results were more representative, the number of children in the sample was increased to 270 so that there were 90 children in each of the three age groups of 8, 11 and 14 year old children. Thirdly, the number of stories in which the linguistic features were embedded was doubled in the case of pronouns and a further four stories were written to examine the group of conjunctions. The test booklets for conjunctions contained the four types of conjunction specified in Halliday and Hasan (1976), that is, additive, adversative, causal and temporal.

The results of experiment two showed a clear developmental pattern. For the pronouns, the scores of the eight year old children showed that the tasks were highly discriminatory with scores ranging from nil to 86 (max. 108). The mean scores of the eleven year olds was double that of the eight year olds showing that mastery of the process as involved is not stable until about eleven years. The fourteen year olds' scores were bunched at the upper end of the scale, but were still not showing a ceiling effect. The correlation of the mean scores and chronological age was significant. The scores on the conjunctions were very low with some fifteen eight year olds making no score. The eleven year olds' pattern of scores resembled that of the eight year olds' pronoun scores

being spread across the range. The fourteen year olds still had an appreciable number of scores at the lower end. (See Chapman 1979c for details).

The results of the older children were much lower than was anticipated and it was clearly shown that although the children's ability to replace key cohesive elements in cloze type tasks increased steadily with age it did not reach mastery until 14 to 16 years of age.

The extent of these findings were such that the experimenter sought other reasons for the surprising nature of the scores. One area that could be criticised related to the construction of the texts. It was thought that the style or register of the passage might have some bearing on the results or that, as the stories had been specially written for the work, they might inadvertently have been the cause for lower than expected scores. A further experiment was set up therefore to investigate this possibility.

Experiment 3

A further group of eleven year olds was chosen and another booklet of cohesive features prepared. This time, as well as the specially written tests, the work of a well known author was chosen and the cohesive ties deleted from a passage running to three pages of continuous texts.

The results confirmed the earlier work the only difference being that the performance on the continuous texts with a large amount of context was poorer.

Discussion

If the results of these three experiments are taken together, it is clear that the ability of children to replace pronouns and conjunctions in cloze tasks is still developing in later schooling. The lateness of the mastery is surprising and particularly so in the case of pronouns because they are members of a frequently used closed set of words, which many teachers would assume to have been

mastered in the early grades. Such expectations come presumably from observation of their correct usage in spoken language, although this assumption itself warrants detailed examination. As the results were contrary to expectation in these respects, how might they be explained?

In the first place, the use of cloze as a measure of performance might receive comment for many teachers have noted its demanding nature. It might be thought that this would, thereby, account for the low scores of the children. However, whilst accepting the stringency of cloze, it has been shown to be capable of tapping overall reading comprehension skills, and thereby global textual features, in a reliable fashion. (Anderson, 1976). It has, furthermore, stood the test of time.

Another factor which is particularly pertinant to these studies and said to be involved in the use of cloze is the claim that it forces the reader's attention on to local context only. The rationale for this being that the reader's attention is drawn first to the deletion space and thence to the words immediately before (rarely after) that deletion instead of the content of text as a whole. In these particular passages, however, the children were required by the anaphoric nature of pronouns to either look further afield for a specific antecedent or to adopt a reading strategy for maintaining that antecedent in working memory as the reading of the text continued. It could be then that these cloze tasks tapped the children's ability to replace pronoun deletions by engaging them in underlying linguistic awareness of working of anaphoric processes. This might make greater demands on them than might have been at first anticipated (Garrod and Sandford, 1977).

If the latter is true it could be said that in such a cloze test, scores on deleted pronouns as exemplars of anaphoric relations might act as indicators of children's growing appreciation of global factor-like cohesion.

Care must be taken however not to extrapolate from these tentative conclusions as there is a great deal of work to be done regarding the cohesive tie system that is said to be operating in texts. Various linguistic factors are working together as the text is read and the feeling for the wholeness of a text is probably the result of their interaction. It would be difficult at the present time to say more of the working of that interaction.

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April 1980.

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